

ABSTRACT

Disclosed is an apparatus and method for canceling an interference signal in a packet data receiver for a packet data communication system in which data is transmitted and received over a packet data channel and a packet data control channel. The packet data channel is time-synchronized with the packet data control channel. A buffer temporarily stores a signal on the packet data channel, combined after being received through multiple paths, until the packet data control channel is decoded. An interference cancellation controller analyzes packet data control channel information obtained by decoding the packet data control channel, and outputs an interference cancellation command signal only when it is determined that effective packet data to be received exists in a current time slot. An interference cancellation section receives the packet data channel signal output from the buffer, and cancels an interference signal from the packet data channel signal only when the interference cancellation command signal is received.